## **ABSTRACT**

A communication system including an amplifier, a receiver, an analog to digital converter (ADC) and an insertion phase variation compensation module. The amplifier receives a communication signal. If the amplifier is enabled, the amplifier amplifies the communication signal and outputs the amplified communication signal to the receiver. If the amplifier is disabled, the amplifier passes the communication signal to the receiver without amplifying it. The receiver outputs an analog complex signal to the ADC. The ADC outputs a digital complex signal to the insertion phase variation compensation module which counteracts the effects of a phase offset intermittently introduced into the communication signal when the amplifier is enabled or disabled.